UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,070	08/09/2000	Steve G. Driediger	98006-4	5644

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EXAMINER
DUONG, FRANK

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _18 June 2004_.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-22_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1,2,9-11,21 and 22_ is/are rejected.

7) ☒ Claim(s) _3-8, 12-20_ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is a response to communications dated 06/18/04. Claims 1-20

are pending in the application.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11
F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*,
418 F.2d 528, 163 USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be
used to overcome an actual or provisional rejection based on a nonstatutory double
patenting ground provided the conflicting application or patent is shown to be commonly
owned with this application. See 37 CFR 1.130(b).
Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

2. Claims 1-2, 9-11 and 21-22 are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claims 4 and 19 of U.S.

Patent No. 6,760,764 in view of Read.

Regarding **claim 1**, claim 4 of the '764 discloses a system for distributing a real

time stamp (RST) between network elements in a multi-element network comprising:

timing means at a master network element to derive a real time stamp; encoding means

at the master network element to encode the real time stamp; and distribution means to

distribute the real time stamp (RTS) to each remaining network element, wherein said

RTS is divided into a high precision portion and a low precision portion, and wherein

said high precision portion of the RTS is distributed to each remaining network element

over a dedicated hardware connection and said low precision portion is delivered by

software messaging.   Claim 4 of the '764 fails to explicitly further discloses the

limitations of "*means in the network element to maintain a record of the most recently*

distributed real time stamp; and means in the network elements to derive a local time

stamp from the recorded time stamp in the event of a failure of the distributed time

stamp". However, such limitations lack thereof from the '764 patent are well known and

disclosed by Read.

In accordance with Read reference entirety, Read discloses a real time

distribution system for a multi-element network (Fig. 1) comprising, among other

limitations, the limitations of means in the network element (*Fig. 1; element 28*) to

maintain a record of the most recently distributed real time stamp (*col. 4, lines 52-56*);

and means in the network elements (Fig. 1; element 37) to derive a local time stamp

from the recorded time stamp in the event of a failure of the distributed time stamp (*col.*

4, lines 56-65) to provide a system that allows a precise synchronization between

multiple devices (*Read, col. 1, lines 42-45*).

Thus, it would have been obvious to those skilled in the art, having the '764 and

Read patents readily available, at the time of the invention was made to combine '764

and Read patents or to modify the '764 patent with Read to arrive the claimed invention

with a motivation to provide a system that allows a precise synchronization between

multiple devices (*Read, col. 1, lines 42-45*).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), '764 paten in view of Read further discloses wherein the local time stamp is disregarded upon receipt of a real time stamp distributed by the master network element (Read, *col. 5, lines 33-67, Read discloses the communication processing delays are stored in the offset register 26 and forwarded to the associated slave control device 14 to compensate for the known time setting errors for each of the slave control devices 14. Thus, the local time stamp is disregarded upon receipt of the delays from the master network element 12*).

Regarding **claim 9**, claim 4 of the '764 discloses a system for distributing a real time stamp (RST) between network elements in a multi-element network comprising: timing means at a master network element to derive a real time stamp; encoding means at the master network element to encode the real time stamp; and distribution means to distribute the real time stamp (RTS) to each remaining network element, wherein said RTS is divided into a high precision portion and a low precision portion, and wherein said high precision portion of the RTS is distributed to each remaining network element over a dedicated hardware connection and said low precision portion is delivered by software messaging. Claim 4 of the '764 fails to explicitly further discloses the limitations of "*means in the network element to maintain a record of its real time stamp; and synchronization means to indicate when the recorded real time stamp is synchronized with real time stamp distributed by the master network element*". However, such limitations lack thereof from the '764 patent are well known and disclosed by Read.

In accordance with Read reference entirety, Read discloses a real time distribution system for a multi-element network (Fig. 1) comprising, among other limitations, the limitations of means in the network element (*Fig. 1; element 28*) to maintain a record of the most recently distributed real time stamp (*col. 4, lines 52-56*); and synchronization means (*Fig. 1; element 32*) to indicate when the recorded real time stamp is synchronized with real time stamp distributed by the master network element (*col. 4, lines 42-44 and lines 53-55*) to provide a system that allows a precise synchronization between multiple devices (*Read, col. 1, lines 42-45*).

Thus, it would have been obvious to those skilled in the art, having the '764 and Read patents readily available, at the time of the invention was made to combine '764 and Read patents or to modify the '764 patent with Read to arrive the claimed invention with a motivation to provide a system that allows a precise synchronization between multiple devices (*Read, col. 1, lines 42-45*).

Regarding **claim 10**, in addition to features recited in base claim 9 (see rationales discussed above), '764 patent in view of Read further discloses wherein the timing means derives a real time stamp from an outside source (Read, *Fig. 1; element 76 and col. 8, lines 41-67*).

Regarding **claim 11** in addition to features recited in base claim 9 (see rationales discussed above), Read further discloses wherein the synchronization means implements a synchronization feature in the network element upon a re-start operation (*col. 4, line 56 to col. 5, line 4*).

Regarding **claim 21**, claim 19 of the '764 patent discloses "a method of

distributing a real time stamp (RST) between network elements in a multi-element

network comprising: providing timing means at a master network element to derive a

real time stamp; providing encoding means at the master network elements to encode

the real time stamp; and providing distribution means to distribute the real time stamp

(RTS) to each remaining network element, wherein the real time stamp is divided into a

high precision portion and a low precision portion and the high precision portion

is delivered to network elements over a dedicated hardware connection and the low

precision portion is delivered via software messaging". The '764 patent fails to explicitly

further discloses the claimed limitations of "*providing means in the network elements to*

maintain a record of the most recently distributed real time stamp; and providing means

in the network elements to derive a local time stamp from the recorded time stamp in

the event of a failure of the distributed time stamp". However, such limitations lack

thereof from the '764 patent are well known and disclosed by Read.

In accordance with Read reference entirety, Read discloses a method of

distributing a real time for a multi-element network (Fig. 1) comprising, among other

limitations, the limitations of providing means in the network element (*Fig. 1; element*

28) to maintain a record of the most recently distributed real time stamp (*col. 4, lines 52-*

56); and providing means in the network elements (Fig. 1; element 37) to derive a local

time stamp from the recorded time stamp in the event of a failure of the distributed time

stamp (*col. 4, lines 56-65*) to provide a system that allows a precise synchronization

between multiple devices (*Read, col. 1, lines 42-45*).

Thus, it would have been obvious to those skilled in the art, having the '764 and

Read patents readily available, at the time of the invention was made to combine '764

and Read patents or to modify the '764 patent with Read to arrive the claimed invention

with a motivation to provide a system that allows a precise synchronization between

multiple devices (*Read, col. 1, lines 42-45*).

Regarding **claim 22**, claim 19 of the '764 patent discloses "a method of

distributing a real time stamp (RST) between network elements in a multi-element

network comprising: providing timing means at a master network element to derive a

real time stamp; providing encoding means at the master network element to encode

the real time stamp; and providing distribution means to distribute the real time stamp

(RTS) to each remaining network element, wherein the real time stamp is divided into a

high precision portion and a low precision portion and the high precision portion is

delivered to network elements over a dedicated hardware connection and the low

precision portion is delivered via software messaging". The '764 patent fails to explicitly

further discloses the claimed limitations of "*providing means in the network elements to*

maintain a record of its real time stamp; and providing synchronization means to

indicate when the recorded real time stamp is synchronized with real time stamp

distributed by the master network element". However, such limitations lack thereof from

the '764 patent are well known and disclosed by Read.

In accordance with Read reference entirety, Read discloses a method of

distributing a real time for a multi-element network (Fig. 1) comprising, among other

limitations, the limitations of providing means in the network elements (*Fig. 1; element*

28) to maintain a record its real time stamp (*col. 4, lines 52-56*); and providing a

synchronization means (*Fig. 1; element 32*) to indicate when the recorded real time

stamp is synchronized with real time stamp distributed by the master network element

(*col. 4, lines 42-44 and lines 53-55*) to provide a system that allows a precise

synchronization between multiple devices (*Read, col. 1, lines 42-45*).

Thus, it would have been obvious to those skilled in the art, having the '764 and

Read patents readily available, at the time of the invention was made to combine '764

and Read patents or to modify the '764 patent with Read to arrive the claimed invention

with a motivation to provide a system that allows a precise synchronization between

multiple devices (*Read, col. 1, lines 42-45*).

Response to Arguments

3. Applicant's arguments with respect to claims 1-2, 1-11 and 21-22 have been

considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

4. Claims 3-8, 21-20 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (571) 272-3164. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Frank Duong
Examiner
Art Unit 2666

January 14, 2005